

CLAIMS

1. A CMP system comprising:
a movably mounted polishing member;
a wafer holder for holding a wafer relative to the polishing member;
a slurry dispenser for dispensing slurry onto the polishing member; and
a conditioner having at least two conditioning members, the conditioning members being independently movable with respect to one another and configured to contact the polishing member.
2. The CMP system of claim 1, wherein the polishing member comprises a polishing belt and wherein the polishing member is linearly movable.
3. The CMP system of claim 1, wherein the polishing member comprises a rotary polisher.
4. The CMP system of claim 1, wherein conditioning members are independently aligned with respect to one another.
5. The CMP system of claim 4, wherein each conditioning member comprises a conditioning disc which contacts the polishing member; and
wherein the conditioning discs are gimbaled independent of one another.
6. The CMP system of claim 5, wherein the conditioning members comprise a main body with a contact surface, the contact surface being pre-shaped based on expected deformation of at least a portion of the polishing member during operation of the CMP apparatus.
7. The CMP system of claim 1, wherein the conditioning members are independently adjustable along a z-axis.
8. The CMP system of claim 1, wherein the conditioning members are independently adjustable based on amounts of pressure of the conditioning members on polishing member.
9. The CMP system of claim 8, wherein each conditioning member has associated with it a pressure sensor; and
wherein the conditioning members are independently movable based on data from the pressure sensors.

10. The CMP system of claim 1, wherein the conditioner further comprises an arm; and
wherein the conditioning members are connected to the arm.
11. The CMP system of claim 1, wherein the conditioner further comprises a first arm and a second arm; and
wherein one conditioning member is connected to the first arm and a second conditioning member is connected to the second arm.
12. The CMP system of claim 1, wherein the conditioning members rotate at different speeds.
13. The CMP system of claim 1, wherein the conditioning members rotate at a same speed.
14. The CMP system of claim 1, wherein the conditioning members rotate in different directions.
15. The CMP system of claim 1, wherein the conditioning members rotate in a same direction.
16. The CMP system of claim 1, wherein each conditioning member comprises a conditioning disc.
17. The CMP system of claim 1, wherein the conditioning members are configured to concurrently contact the polishing element.
18. The CMP system of claim 1, wherein pressure applied by each of the conditioning members on the polishing member is substantially uniform.